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Signature

## UTILITY PATENT APPLICATION

	T1100#100#10110			
Title	Stabilized Immunogenic Hbc Chimer Particles			
First Inventor	Katelynne Lyons			
Attomey Docket No.	ICC-136.0 (88881)			
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1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing)  7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)	PIRANSIVIIIIAL								
APPLICATION ELEMENTS  See MPEP chapter 600 concerning utility patient application contents.  ADDRESS TO: Commissioner for Patents (D. Box 4551-145)  To Box 457 (P. 127)  Fee Transmittal Form (e.g., PTO/SBI/T)  Applicant claims small entity status.  See 37 FR 1.27.  Applicant claims small entity status.  See 37 FR 1.27.  Descriptive title of the invention  Cross Reference to Sequence listing, a table, or a computer program listing appendix behavior of the Invention  Box 67 (P. 127)  Box 67 (P. 127)  Box 67 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (Appendix)  Succeeded and/or Annion Acid Sequence Submission (if applicable)  Box 67 (P. 127)  Box 68 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program listing appendix or a computer program listing appendix  Box 67 (P. 127)  Box 68 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program is the program listing appendix or a computer program listing appendix  Box 68 (P. 127)  Box 68 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (Appendix)  Box 69 (P. 127)  Box 69 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (Appendix)  Box 69 (P. 127)  Box 69 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (Appendix)  Box 69 (P. 127)  Box 69 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (Appendix)  Box 69 (P. 127)  Box 69 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (Appendix)  Box 60 (P. 127)  Box 69 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (CRF)  Box 60 (P. 127)  Box 60 (P. 127)  To D-ROM or CD-R in duplicate, large table or computer program (CRF)  Box 60 (P. 127)  Box 60 (P. 127)  To D-ROM or CD-R (2 copies) for inclination or computer program (CRF)  Box 60 (P. 127)  Box 60 (P. 127)	(Only for new	nonprovisional applications under 37 CFR 1.53(b))	Express	Mail Label		E	V3371	00549US	
1.	See MPEP		ontents.	,==.	ADDRESS	TO: Cor	nmissio ). Box 1	oner for Patents 450	PTO 63
4.  Prawing(s) (35 U.S.C. 113)   Total Sheets   11   1	2. A Signature (p. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	pplicant claims small entity status. ee 37 CFR 1.27.  pecification [Total Pages preferred arrangement set forth below]  Descriptive title of the invention Cross Reference to Related Applications Statement Regarding Fed sponsored R & Descriptive to sequence listing, a table, or a computer program listing appendix Background of the Invention Brief Description of the Drawings (if filed) Detailed Description Claim(s)	215 ]	8. Nucle (if appliance) a. b.	Computer otide and/or icable, all nec Specificati i. State COMPAN Assignmen 37 CFR 3.7	Program Amino A essary)  nputer Re on Seque CD-ROM Paper ements v  YYING t Papers (3(b) Stat	(Appended Acid Seadable ence Left or Coverifying (Covering ence ence ence ence ence ence ence en	endix) equence Submission e Form (CRF) .isting on: D-R (2 copies); or eg identity of above copies LICATION PARTS r sheet & document(s))	8 16018 U.
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:  Continuation Divisional Continuation: Divisional Continuation: Divisional Continuation: Divisional Continuation-in-part (CIP) of prior application No.: Group / Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.  19. CORRESPONDENCE ADDRESS  Customer Number:  or Correspondence address below  Edward P. Gamson, Esq. WELSH & KATZ, LTD.  Address  120 South Riverside Plaza 22nd Floor  City Chicago State Illinois Zip Code 60606	4.	rawing(s) (35 U.S.C. 113) [Total Sheets]  Declaration [Total Pages]  Newly executed (original or copy)  Copy from a prior application (37 CF (for continuation/divisional with Box 18 co.  i. DELETION OF INVENTOR(S) Signed statement attached deletinamed in the prior application, see 1.63(d)(2) and 1.33(b).	FR 1.63(d)) mpleted) S) ng inventor(s	11.	English Tra Information Statement Preliminary Return Rec (Should be s Certified C (if foreign pri Nonpublica (b)(2)(B)(i). or its equiv	inslation I Disclosu (IDS)/PTO Amendin Deipt Post pecifically popy of Pri prity is claid tion Requ Applicat alent. NEXECU	Documure O-144 nent card (itemize iority Emed) uest unit mus	Copies of IDS Citations  MPEP 503) d) Document(s) nder 35 U.S.C. 122 st attach form PTO/SB/3	
Name   Edward P. Gamson, Esq.	specification for Co	onlowing the title, or in an Application Data Sheet upontinuation Divisional Continual Divisional D	nder 37 CFF ation-in-pa re disclosu e accompa a portion ha	rt (CIP) of p re of the prior nying continua is been inadve	Groupplication, application, tion or divisitently omitte	ion No.: _ up / Art Uni from whice onal appli d from the	it: ch an ication e subm	oath or declaration is su and is hereby incorpora hitted application parts.	pplied ted by
Name         WELSH & KATZ, LTD.           Address         120 South Riverside Plaza           22nd Floor         22nd Floor           City         Chicago         State         Illinois         Zip Code         60606				<del></del>		- 631			
Address 120 South Riverside Plaza  22nd Floor  City Chicago State Illinois Zip Code 60606	Name								
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This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Complete (if applicable)

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December 10, 2003

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL			Compl te if Known						
	Application Number			oer	Unknown				
for FY 2004	Filing Date				December 10, 2003				
Effective 10/01/2003. Patent fees are subject to annual revision	on.	First	Name	d Inve	ntor	Katelynne Lyons			
Applicant claims small entity status. See 37 CFR 1.27			niner I	Vame		Unknown			
		Art U	Jnit			Unknown			
TOTAL AMOUNT OF PAYMENT (\$) \$619	00.0	Attor	ney D	ocket l	No.	ICC-136.0 (88881) US	ICC-136.0 (88881) US		
METHOD OF PAYMENT (check all that apply)	F	FEE CALCULATION (continued)							
Charle Cradit cord Money Other None	3. 4	3. ADDITIONAL FEES							
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Deposit	Code	: (\$)	Code	(\$)	Curaba	Fee Description	Fee Paid		
Account Number 23-0920	105		2051			arge - late filing fee or oath arge - late provisional filing fee or cover			
Deposit Account Welsh & Katz, Ltd.	105	2 50	2052	25	sheet				
Name Weisii & Ratz, Etd.	105		1053			English specification			
The Director is authorized to: (check all that apply)		2 2,520	1			ing a request for ex parte reexamination			
Charge fee(s) indicated below Credit any overpayments	180	4 920*	1804	920*	Reque action	esting publication of SIR prior to Examiner			
Charge any additional fee(s) or any underpayment of fee(s)	180	5 1,840°	1805	1,840*	Reque	esting publication of SIR after Examiner			
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FEE CALCULATION	125	2 420	2252	210	Extens	sion for reply within second month			
1. BASIC FILING FEE	125	3 950	2253	475	Extens	sion for reply within third month			
Large Entity   Small Entity	125	4 1,480	2254	740	Extens	sion for reply within fourth month			
Fee Fee Fee Fee Description	125	5 2,010	2255	1,005	Extens	sion for reply within fifth month			
Code (\$) Code (\$) 1001 770 2001 385 Utility filing fee 385.00	140	1 330	2401	165	Notice	e of Appeal			
1002 340 2002 170 Design filing fee	140	2 330	2402	165	Filing	a brief in support of an appeal			
1003 530 2003 265 Plant filing fee	140	3 290	2403	145	·-	est for oral hearing			
1004 770 2004 385 Reissue filing fee	145	1 1,510	1451	1,510	Petitio	on to institute a public use proceeding			
1005 160 2005 80 Provisional filing fee	145	2 110	2452			on to revive - unavoidable			
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2. EXTRA CLAIM FEES FOR UTILITY AND		1 1,330	2501	665	•	issue fee (or reissue)			
Fee from Extra Claims below Fee Paid	150		2502	240	_	in issue fee			
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Independent 3 - 3** = 0 X 43.00 = 0.00	146		1460	130		essing fee under 37 CFR § 1.17(q)			
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1202 18 2202 9 Claims in excess of 20	180	9 770	2809	385		a submission after final rejection FR § 1.129(a))			
1201 86 2201 43 Independent claims in excess of 3	181	0 770	2810	385	For ea	ach additional invention to be examined			
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1204 86 2204 43 ** Reissue independent claims over original patent	180		2801 1802		•	est for expedited examination			
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Edward P. Gamson

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Registration No.

(Attorney/Agent)

29,381

CERTIFICATE OF	Docket No. (4564/88881)							
Applicant(s): Lyons et al.								
Serial No.	Filing Date	Examiner	Group Art Unit					
Unknown	December 10, 2003	Unknown	U	Unknown				

Fee Transmittal for FY 2004 (1pg), Utility Patent Application Transmittal (1pg), Application Data Sheet (5pgs), Unexecuted Declaration and Power of Attorney document (3pgs), Patent Application including Specification, 46 claims and abstract (216 pgs), 11 sheet of formal drawings (Figs. 1-5), Copy of Statement Under 37 CFR §1.821(f) with Cert of Express Mail (3pgs), Copy of Sequence List (pgs); Computer readable disk with Sequence List and Check No. 084583 in the amount of \$619.00, and Return Postcard.

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-0001 on December 10, 2003.

Daryl Jones

(Typed or Printed Name of Person Mailing Correspondence)

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